Index to Volume XXIII.

Air Supply for Cupola..... 34
Allis-Chalmers Co., West Allis Foundry of..... 155
Alloys, Obtaining the weight of..... 278
Alloys, Non-Corrosive..... 179
Allyne Brass Foundry Co., Cleveland, O..... 169
Aluminum Castings to Resist Pressure..... 39
American and English Foundry Tools..... 24
" " Foundrymen's Association Journal, New Form of..... 179
Analysis as a Help to Melting..... 80
A. S. M. E., Annual Meeting of.....152, 227
Associations and Societies..... 286
Australian Foundry Experience..... 67
A Windy Scheme that Refused to Work..... 18
Bearings, Car Journals..... 233
Beds, Method of Making..... 79
Blast Furnace Conditions and the Composition of Foundry Iron..... 131
Books, New.....137, 239, 283
Borings, Loss of Sulphur in Cast Iron..... 23
" Melting of Cast Iron in Cupola..... 189
Bottom of a Green Sand Mold..... 216
Brass, Dipping of..... 280
" For Car Journal Bearings 233
" Foundry Co., Allyne..... 169
" " Notes on the..... 281
" Foundries, Melting Ratio in..... 20
" Founders, Points for.....229, 276
" Founding, Points in..... 86
" Furnace, an Emergency 182
" " The Wever Triplex..... 211
" Liners, Casting of on Tail Shafts..... 176
" Melting Furnaces, Kirkwood Oil System for 230
" " In the Cupola..... 84
Bronze Formulas, Phosphor..... 39
Buffalo Foundry Co..... 247
Building Materials, Some New..... 177
Buying Pig Iron on Specification..... 31
Calculation of Furnace Charges by Percentages.. 232
Carbon, Kish, Son of..... 267
Carborundum Co., Growth of..... 97
Car Journal Bearings 233
Car Wheel Consolidation..... 122
Cast Iron Borings in the Cupola..... 189
" " Chill of..... 238
" " Malleable 163
" " Notes.....8, 123, 187, 238, 282
" " Tinning 29, 184
Casting, a Gigantic..... 209
" A Novel..... 177
" Brass Liners on Tail Shafts..... 176
" Cracking of a..... 238
" In Chills 182
" Ring Pulleys..... 175
Castings, Cause of Defective..... 96
" Containing Wrought Iron and Steel... 277
" Cost of Defective..... 130
" For Hydraulic Cylinders..... 244
" Pickling 109
" From Dirty Iron, Defective..... 111
" Steel 77
" Strong 239
Catalogues, New Trade.....135, 191, 239
Chicago Foundry Foremen's Association, Meeting of 187
Chicago Foundry Foremen's Association, Officers of 225
Chicago Sand Rammer 45
Chill of Cast Iron..... 238
Chills, Casting in..... 182
Coke, Sulphur in..... 283
" The Use of Waste..... 187
Continuous Operation of the Foundry..... 18
Converters, Sideblown Steel..... 260
Copper and its Alloys, Presence of Iron in..... 90
" Recovery of from Picking or Dipping Solutions 38
Core for 3-Foot Relief Valve..... 268
" Ovens of the Westinghouse Co. at Trafford City 186
Cores, Drying of, with Steam..... 269
Corliss Cylinders in Dry Sand..... 181
Cost-Keeping, Foundry..... 3
Cost of Defective Castings..... 130
Cracking of Casting..... 238
Crane, a Cheap..... 276
" A Four-Ton Jib..... 226
Cupola Air Supply..... 34
" Desulphurizing Iron in.....230, 245
" Manganese in the..... 245
" Melting Brass in the..... 84
" " Cast Iron Borings in..... 189
" Practice 171
" Proportions of 282
" Scheme for Blast for..... 18
" Slagging and Fluxing a..... 123
Cylinders in Dry Sand, Corliss..... 181
Deaths.....41, 49, 93, 140, 190, 240, 287
Deep Lifts, Finishing of 15
Defective Castings from Dirty Iron..... 111
Desulphurizing Iron in the Cupola.....230, 245
Dipping Brass..... 280
" Solutions, Recovery of Copper from.. 38
Dry Sand, Corliss Cylinders in..... 181
Drying Cores with Steam..... 269
" Molds 120
" out, Sawdust for..... 11
Edwards Co., O. M., Plant of..... 30
Electric Club Journal..... 232
Emery Wheel Practice in Foundries..... 117
Finishing Deep Lifts..... 15
Fires 41, 93, 140, 190, 240, 288
Fixture, A Cheap..... 278
Flask Pin, a New..... 221
Floor Molding Without Patterns..... 50
Fluxing a Cupola..... 123
Foreman, The Ideal..... 6
Foundations, Turn-Table..... 224
Foundry, a Modern German..... 201
" A Modern Jobbing..... 247
" Backwardness 3
" Cost-Keeping 3
" Exhibit at St. Louis..... 244
" Experience, Australian..... 67
" Floor Pits in Wet Soils..... 178
" Foremen's Association..... 122
" " Ass'n, Indianapolis Division of, 152
" Iron, Standards for Buying..... 82
" Management 17
" Notes on the Brass..... 281
" of B. F. Sturtevant Co..... 100
" " Lindemann & Hoverson Co., at Milwaukee..... 81
" " the Allis-Chalmers Co., at West Allis, Milkaukee, Wis..... 155
" " the Buffalo Foundry Co..... 247
" " " Interstate Foundry Co..... 13
" " " National Meter Co., Brooklyn, N. Y..... 223
" " " Westinghouse Co., at Trafford City 58
" (Pipe) of the Massillon Iron & Steel Co., 125
" Plant of Maher and Flockhart at Newark, N. J..... 112
" Purchase System 70
" Responsibility, Relation of to Designing Room 24
" School 74
" Specifications for 48
" the Continuous Operation of..... 18
" The Metallurgical Engineer in..... 35
" Tools, English and American..... 24
" Work at Worcester Tech. 27
Foundries, Emery Wheel Practice in..... 117
Founders' Association, National..... 147
Founders, Points for Brass..... 276
Founding, Points in Brass..... 86
Foundrymen's Association, Southwestern..... 198
" Outing, New England..... 89
Furnace, a New Oil Melting..... 237
" Charges, Calculation of by Percentages 232
" The Lukenheimer Melting..... 258
" " Orbison Melting..... 270
" Rockwell Rotary Melting..... 266
" the Wever Triplex Brass..... 211
Gate Patterns..... 4
Gear Wheels, Casting of in Chills..... 182
General Industrial Notes..41, 76, 93, 143, 194, 242 290
German Foundry, a Modern..... 201
Gigantic Casting, a..... 209
Giving Iron Away..... 224
Glue, Use of in Molds..... 281
Grate Bars, Best Mixture for..... 188
Great Northern's New Shops..... 92

Index to Volume XXIII—Continued.

Green Sand Mold, the Bottom of..... 216
" " " Top of 253
Hand Ramming and Power Ramming Molding Machines 38
Hard Iron Difficulties..... 188
How They Go it in Manchester..... 9
Hydraulic Cylinder Castings 244
Indianapolis Division of Foundry Foreman's Ass'n 152
Industrial Notes.....10, 41, 76, 93, 143, 194, 242, 290
Interstate Foundry Co.'s Plant, The..... 13
Iron, Blast Furnace Conditions and the Composition of Foundry..... 131
" Chill of Cast..... 238
" Defective Castings from Dirty..... 111
" Desulphurizing of in Cupola.....230, 245
" Difficulties With Hard..... 188
" Giving of Away..... 224
" in Copper and Its Alloys, Presence of..... 90
" Malleable Cast..... 163
" Mixture, a Hard..... 187
" Molders' Union, New President of..... 85
" Standards for Buying Foundry..... 82
" Steel and Other Alloys, Review of..... 137
" Tinning of Cast..... 184
" White, Caused by Sulphurous Coke..... 123
Jib Crane, a Four-Ton..... 226
Journal of the American Foundrymen's Association, New Form of..... 179
Kirkwood Oil System for Brass Melting Furnaces, 230
Kish, Son of Carbon..... 267
Lindemann & Hoverson Co.'s Foundry at Milwaukee 81
Loss of Sulphur in Cast Iron Borings..... 23
Lunkenheimer Melting Furnace, The..... 258
Maher & Flockhart, Newark, N. J., Foundry Plant of 112
Malleable Cast Iron..... 163
Iron Stoves..... 183
Manchester, How They do it in..... 9
Manganese in the Cupola..... 245
" Use of in Cupola..... 230
Manufacturers' Ass'n of Pittsburg, Meeting of.. 137
Massillon Iron Steel Co., Pipe Foundry of.... 125
Matchboards 92
Melting, Analysis as a Help to..... 80
" Brass in the Cupola..... 84
" Furnace, a New Oil..... 237
" " Lunkenheimer 258
" " Rockwell Rotary 266
" " The Orbison 270
" Methods 236
" Ratio 8
" " and Mixture 123
" " in Brass Foundries..... 20
Mesta Machine Co., Pittsburg Foundrymen's Association at 137
Metallurgical Engineer in the Foundry..... 35
Milwaukee Foundry Foremen's Association..... 5
Mixture for Grate Bars 188
" Stove Plate..... 289
Mold, An Open-Sand Pulley..... 153
" Bottoms 198
" the Bottom of a Green Sand..... 216
" Top of a Green Sand..... 253
Molds, Drying of 120
" Use of Glue in..... 281
Molding Machine, a New..... 189
" " for Drop Hangers..... 178
" " Pneumatic Jarring..... 139
" " the Modern 235
" Machines, Hand and Power Ramming... 38
" " Some Little Known 25
" " Special 40
" Without Patterns, Floor..... 50
National Founders' Association 147
" Meter Co., Brooklyn, N. Y., Foundry of 223
New Construction 142, 192, 241, 289
New England Foundrymen's Outing..... 89
" " " Ass'n Meeting 137, 199
Nickel, Recovery of from Scrap Anodes..... 153
Non-Corrosive Alloys 179
Novel Mfg. Plant, A..... 30
Obermeyer, the S., 30th Anniversary of..... 152
Oil Melting Furnace, a New..... 237
" System for Brass Melting Furnaces, Kirkwood, 230
Open-Sand Pulley Mold 153
Orbison Melting Furnace 270
Ovens, Core of the Westinghouse at Trafford City, 186
Patents, Some Recent 185, 228
Pattern Tracer, A..... 40
Patterns, Floor Molding Without..... 50
" Gate 4
Paxson Co., J. W., Molding Machines..... 189
Pay Roll System and Time Keeping..... 272
Personals 41, 49, 140, 189, 240, 287
Philadelphia Foundrymen's Ass'n, Meeting of 152, 199
Phosphor Bronze, Formulas 39
Pickling Bed at the Reed Foundry..... 184
" Castings 109
" Solutions, Recovery of Copper from.. 38
Pig Iron, Buying of on Specification..... 31
Pipe Foundry of the Massillon Iron & Steel Co.... 125
Pittsburg Foundrymen's Association..... 200
" " " at the Mesta Machine Co..... 137
Plates, Stripping 214
Pneumatic Jarring Molding Machine..... 139
" Sand Rammer..... 45
Publications, Trade..... 135, 192, 239, 284
Pulley, Making a Without an Anchor..... 8
Pulleys, Casting Ring 175
Purchase System for the Foundry..... 70
Rammer, Chicago Sand 45
Reed Foundry, Pickling Bed at..... 184
Rockwell Rotary Melting Furnace..... 266
Sand Sifter, a New..... 269
Sawdust for Drying Out..... 11
School, a Foundry..... 74
Scrap, Use of in Mixture..... 238
Shall Foundry Responsibility Begin in the Designing Room..... 24
Shirley, Ind., Improvements 221
Shrinkage and Silicon..... 187
" Cavities 188
" of Iron Mixture 282
Sideblown Steel Converters 260
Silicon and Shrinkage 187
Slagging and Fluxing of Cupola..... 123
Societies and Associations 286
Solutions, Recovery of Copper from Pickling or Dipping 38
Southwestern Foundrymen's Association..... 198
Specification, Buying Pig Iron on..... 31
Specifications for the Foundry..... 48
Standards for Buying Foundry Iron..... 82
Steam, Drying Cores With..... 269
Steel Castings 77
" Converters, Sideblown 260
" in Iron Castings 277
St. Louis, Foundry Exhibit at..... 244
Stove Founding 283
Stove Plate Mixture..... 289
Stoves, Malleable Iron..... 183
Stripping Plates 214
Sturtevant Co., B. F., Foundry and Pattern Department of 100
Sulphur in Coke 283
" Loss of in Cast Iron Borings..... 23
Sweeping, A Cheap Fixture..... 278
System for Time Keeping and Pay Roll 272
Time Keeping and Pay Roll System..... 272
" Saver, a Convenient 79
Tinning Cast Iron 29, 184
Tools, American and English Foundry..... 24
Top of a Green Sand Mold..... 253
Trade Outlook 1, 47, 99, 147, 197, 243
Trade Publications.....135, 192, 239, 284
Turn-Table Foundations 224
Union, New President of Iron Molders'..... 85
Valentine, J. F., President of Iron Molders' Union 85
Valve, Core for 3-ft. Relief..... 268
Weight of Alloys, Obtaining of..... 278
West Allis Foundry of Allis-Chalmers Co..... 155
Westinghouse Foundry Co.'s Plant at Trafford City 58
Wever Triplex Brass Furnace..... 211
Worcester Tech. Foundry Work at..... 27
Wrong Places to Save..... 197
Wrought Iron in Castings..... 277